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PATENT
Attorney Docket No. ASC-044

COPY OF AMDT W/REQ. FOR RCE, FILED ON 04/17/03.
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Eugene A. Fitzgerald et al.
SERIAL NO.: 09/884,172 GROUP NO.: 2812
FILING DATE: June 19, 2001 EXAMINER: Christopher W. Lattin
TITLE: METHOD OF FABRICATING CMOS INVERTER AND
INTEGRATED CIRCUITS UTILIZING STRAINED SILICON
SURFACE CHANNEL MOSFETS

Box RCE
Commissioner for Patents
Washington, D.C. 20231

AMENDMENT AND RESPONSE TO THE OUTSTANDING OFFICE ACTION

Sir:

This is an amendment to the above-identified application in response to the Office
Action mailed on January 24, 2003.

In the Claims

Please amend the claims in accordance with the clean and marked-up versions
that accompany this paper.

REMARKS

In the Office Action mailed on January 24, 2002, the Examiner rejected claims 1,
4-13, and 16-25 as obvious over Rim et al. in view of Kub et al. The Examiner notes that
Kub et al. teaches a surface roughness of less than 10 Å, concluding, "It would have been
obvious to one skilled in the art at the time of the invention to planarize, either by

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polishing or oxide formation according to the method taught by Kub et al., a layer between the substrate and the strained layer ... in order to enhance adhesion."

For the reasons that follow, we respectfully traverse this contention to the extent it is maintained against the amended claims. Certainly the present inventors do not claim to have originated planarization, and we recognize the utility of a smooth surface in the bonding context of Kub et al. — i.e., to enhance adhesion between surfaces brought into contact.

The present invention, however, is directed toward use of a planarized layer beneath a strained layer. It is found that the smoothness imparted to an intermediate layer by planarization persists in an overlying layer, even if the overlying layer is strained (i.e., lattice-mismatched with respect to an underlying layer), and even if that layer is deposited epitaxially. We have amended claim 1 to emphasize this concept, which is neither taught nor suggested by Kub or by Rim et al.

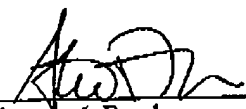
Accordingly, we submit that all claims are now in condition for allowance. Please charge any fee occasioned by this paper to our Deposit Account No. 20-0531.

Respectfully submitted,

Date: April 17, 2003
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